Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions	)	Docket No. 12-268

COMMENTS OF CELLULAR SOUTH, INC.

Cellular South, Inc. (d/b/a C Spire Wireless) ("C Spire") submits these comments in response to the Notice of Proposed Rulemaking ("NPRM") issued in the above-captioned proceeding.[1]

INTRODUCTION

Congress has provided the Commission with a clear principle for conducting spectrum auctions. The Commission is to design and implement spectrum auctions in a manner that promotes economic growth and competition in the wireless industry while avoiding the harms caused by the concentration of spectrum licenses in the hands of too few licensees. Today's wireless industry is heavily consolidated. Not since the Commission assigned the first spectrum licenses for cellular use has it been so critical for the Commission to adhere closely to its Congressional guidance.

With the auction of the 600 MHz spectrum, the Commission has a chance to address further concentration of spectrum in the wireless industry while generating new opportunities for competitive operators and new entrants to spur greater innovation and access to wireless services. Through the adoption of several basic auction structures and simple service rules, like

[1] *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Notice of Proposed Rulemaking, Docket No. 12-268 (rel. Oct. 2, 2012) ("NPRM").

clear auction eligibility requirements and band plans, small geographic license areas, and aggressive build-out requirements, the Commission can enable valuable low band spectrum to reinvigorate wireless competition and generate entirely new economic opportunities for many American consumers and communities.

DISCUSSION

THE COMMISSION SHOULD STRUCTURE THE AUCTION TO PROMOTE WIRELESS COMPETITION

The Commission's incentive auctions must include structural mechanisms that will ensure competitive wireless network operators and new entrants have a meaningful opportunity to acquire usable spectrum, enhance competition, and provide consumers with viable alternatives to the Bell duopoly.

This need is particularly acute in the context of the 600 MHz spectrum. As the Commission has acknowledged, access to low band spectrum (i.e., spectrum below 1 GHz), which provides broader geographic coverage at lower costs than spectrum above 1 GHz, is "important for other competitors to meaningfully expand their provision of mobile broadband services or for new entrants to have a potentially significant impact on competition."[2]

A. Basic Rules that Promote Competition at Auction will Reduce the Need for More Intrusive Regulation Later

The substantial increase in wireless industry consolidation requires the Commission to structure the auction in a way that ensures the participation of a broad cross-section of current and potential new wireless operators.

In the last 10 years, the number of nationwide wireless operators has declined to just four. In that same decade, many "regional and rural facilities-based providers have exited the

[2] *AT&T-Qualcomm Order*, ¶¶ 49-51.

marketplace through mergers and acquisitions."[3] This week's sale of ATNI's Alltel operations (and its nearly 600,000 subscribers) to AT&T is just the most recent example of this phenomenon.[4]

As of 2010, per the Herfindahl-Hirschman Index ("HHI"), wireless industry consolidation measured 2,848—nearly 350 points *above* the HHI's threshold of a "highly concentrated" market.[5]

The Commission must, therefore, implement auction structures that prevent the 600 MHz incentive auction process from resulting in further consolidation. Otherwise, the auction could result in cementing the Bell duopoly, eliminating further competition from the marketplace, and leaving the Commission with no choice but to engage in heavy-handed, public-utility style regulation of a wireless industry dominated by just two operators.

In an effort to allow market forces, rather than substantial Commission intervention, to foster innovation and regulate pricing in the wireless industry, Congress required the Commission to design spectrum auctions that promote wireless industry competition. The Commission is to conduct spectrum auctions in a manner that will "promot[e] economic opportunity ***and competition*** . . . by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants . . . ."[6]

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3 *See* Mobile Spectrum Holdings NPRM, ¶ 14.

4 *See* "AT&T to Acquire Wireless Spectrum and Assets from Atlantic Tele-Network, Inc." (January 22, 2013) ("AT&T…announced that it has signed an agreement with Atlantic Tele-Network, Inc. (ATNI) to acquire the company's U.S. retail wireless operations, operated under the Alltel brand, for $780 million in cash…. AT&T will acquire wireless properties, including licenses, network assets, retail stores and approximately 585,000 subscribers.")

5 *See* 15th Wireless Competition Report, ¶ 2.

6 47 U.S.C. § 309(j)(3)(B) (emphasis added).

Additionally, with Section 6404 of the 2012 Spectrum Act,[7] Congress reaffirmed the Commission's authority to implement objective qualification and eligibility criteria regarding all potential bidders in the broadcast incentive auction. Section 6404 provides that the Commission's existing authority "to adopt and enforce rules of general applicability, including rules concerning spectrum aggregation that promote competition" shall remain unimpeded.[8] Congress's rationale for this provision is straightforward: "Maintaining the FCC's current range of tools for structuring a spectrum auction . . . provides the agency with the requisite flexibility to attract a significant number of bidders to ensure competitive bidding necessary to maximize auction revenues and that the market for spectrum remains competitive for companies of all sizes."[9]

B. A Few Specific Auction Structures Now Can Foster Wireless Competition for Years to Come

As it has done before,[10] the Commission can and should establish objective qualifications of general applicability that will ensure the broadcast incentive auction is both fair and promotes competition. In particular, the Commission can and should adopt (1) auction eligibility

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7 Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6404, 126 Stat. 156 (2012).

8 Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6404, 126 Stat. 156 (2012).

9 Letter from Senators Kerry, Snowe, Warner, and Moran to Majority Leader Reid and Minority Leader McConnell (January 9, 2012).

10 *See, e.g., Revision of Rules and Policies for Direct Broadcast Satellite Service*, IB Docket No. 95-168, Order, 11 FCC Rcd 9712, 9731, ¶¶ 49, 61–66 (1995) (one-time rule prohibiting incumbent licensees from bidding on new DBS licenses to promote entry); *Service Rules for the 746–764 and 776–794 MHz Bands and Revisions to Part 27 of the Commission's Rules*, Second Report and Order, 15 FCC Rcd 5299, 5326, ¶¶ 62–63 (2000) (rules for 700 MHz guard band prohibiting one licensee from obtaining both licenses in a market); *see also* PCS (A- through F-Block) and LMDS auction eligibility restrictions and DE opportunities.

requirements, (2) band plans, (3) small geographic license areas, and (4) build-out requirements that foster competition.[11]

1. Auction Eligibility Requirements

Together, the 1996 Communications Act[12] and the 2012 Spectrum Act provide the Commission with the Congressional authority and specific direction to "adopt and enforce rules of general applicability . . . concerning spectrum aggregation that promote competition."[13] One way that the Commission can fulfill this obligation is through careful and considered eligibility requirements for its spectrum auctions.

For example, the Commission should weigh carefully the existing spectrum holdings – particularly low band spectrum holdings – of all potential auction participants. Over the past several years low band spectrum has become further concentrated in the hands of the largest operators.[14] This has forced competitors and new entrants to undertake more costly network deployments utilizing higher band spectrum – generally, spectrum above 1 GHz – which has less robust propagation characteristics.

The Commission should adopt a spectrum screen that accounts for the aggregation of low band spectrum by the largest operators. That screen should be applied to the 600 MHz spectrum

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11 In addition, the Commission should consider (1) implementing a system of bidding credits to offset the barriers of entry posed by the consolidation of today's wireless marketplace, and (2) the impact certain auction mechanics, like package bidding, blind bidding or other processes that add layers of complexity to an already complex analysis of spectrum valuation, may have on the participation of smaller operators or new entrants in the incentive auction process.

12 47 U.S.C. § 309(j)(3)(B)

13 Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6404, 126 Stat. 156 (2012).

14 *See,* Notice of Ex Parte Presentation by Free Press: WT Docket Nos. 11-18, 11-65, DA 11-252 (April 27, 2011); Congressional Research Service Report No. R41813, p. 14 (July 7, 2011).

at issue in this proceeding. The Commission should then provide a set of upfront and predictable rules regarding each bidder's eligibility in the incentive auction, based on the screen.

2. Band Plan

The organizing principle for all determinations regarding the band plan for the 600 MHz band should be this: the Commission must encourage competition by maximizing the amount of licensed spectrum available to be put to timely use for mobile broadband services. Many of the NPRM's proposals are consistent with this principle.

a. Block Size

The NPRM proposes to license 600 MHz spectrum in 5 MHz blocks.[15] C Spire believes that a 5 MHz block size is appropriate because it allows for the maximum number of spectrum blocks in each geographic license area to be converted to mobile broadband use. A 5 MHz block configuration would also allow operators that seek to acquire multiple blocks of spectrum in a given geographic area to do so efficiently and consistently with current industry standards (i.e., to support 5x5 MHz or 10X10 MHz LTE deployments).[16]

b. Block Configuration

The NPRM also proposes to configure the 600 MHz band with (1) uniform amounts of downlink spectrum and (2) varying amounts uplink spectrum in each given service area.[17]

Wherever possible, licensed spectrum should be paired to allow for the fastest and most efficient deployment of mobile broadband services on the auctioned spectrum.[18] Paired spectrum blocks are, of course, essential to the speedy deployment of mobile broadband services.

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15 NPRM ¶ 128.

16 *Id*. ¶ 130.

17 *Id*. ¶ 131.

18 *Id*. ¶ 132.

And, because the 600 MHz spectrum offers extremely good propagation characteristics, paired blocks within the band can provide competitive operators and new entrants – especially those serving non-urban areas – with opportunities to efficiently deploy new services. Therefore, C Spire urges the Commission to offer unpaired spectrum ***only after*** the Commission has paired as many blocks as possible in a market.

3. Geographic License Areas

In order to promote competition and the broadest possible deployment of mobile broadband services, the Commission must auction licenses that cover relatively small geographic areas. This will maximize the number of potential bidders in any given geographic area.

First and foremost, the Commission should avoid repeating the mistake made with the 700 MHz Upper C block licenses, when large geographic license areas were used to facilitate an effortless path to a nationwide license. There, because of the large geographic size of the licenses, very few Auction 73 participants bid for the Upper C Block licenses and, ultimately, auction revenue for the spectrum was reduced. By contrast, the smallest geographic license areas in Auction 73 – the 700 MHz Lower B Block, which was divided into 734 CMAs – brought the highest price per MHz/POP of any block of spectrum.[19] The clear lesson to be learned from the 700 MHz Upper C Block experiment is that competitive operators, Designated Entities, and virtually all other new entrants cannot realistically participate in the bidding for the largest geographic license areas. This effectively awards those licenses to the Bell incumbents for the reserve price, which shortchanges the United States Treasury and further concentrates valuable spectrum in the hands of the largest operators.

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[19] *See*, Auction 73 summary data of *Wireless Strategy* (http://www.wirelessstrategy.com/auction8.html)

In order to balance the competing desires to maximize revenue and allow for efficient geographic aggregation of licenses, C Spire urges the Commission to auction the licenses in geographic blocks corresponding to Economic Areas (EAs) as proposed in the NPRM.[20]

a. Interoperability

The need for the incentive auction structure to ensure interoperability cannot be understated. The Commission's goals should be (1) to have as few band specifications cover as much spectrum as possible and (2) to ensure that the largest operators cannot create essentially exclusive wireless ecosystems by acquiring nationwide licenses utilizing only a few spectrum blocks.

As the Commission is aware, balkanization of the 700 MHz spectrum band has resulted in one 700 MHz device ecosystem controlled by AT&T and another controlled by Verizon. This happened because, as a result of Auction 73, Verizon was able to capture a nationwide 700 MHz license area utilizing only the Upper C Block spectrum (3GPP Band 13), while AT&T acquired a substantial coverage area utilizing only Lower B and C Block spectrum. In AT&T's case, this allowed AT&T to leverage its enormous scale over the U.S. wireless market to carve out a separate band specification (3GPP Band 17) covering only the Lower 700 MHz B and C blocks of spectrum and to then procure devices that function only on that spectrum. Operators who have sought to incorporate Lower A Block spectrum into their deployments have been thwarted by an inability to acquire devices from vendors that could interoperate across all Lower 700 MHz networks. As a result, deployments on the Lower 700 MHz spectrum (by licensees other

[20] NPRM ¶ 148.

than AT&T) have been almost completely stopped – stifling economic growth and mobile broadband access throughout much of the country's non-urban areas.[21]

The Commission should not allow this to happen again in the 600 MHz spectrum. And, the Commission has the power to protect the 600 MHz band from balkanization by requiring interoperability – requiring that all devices deployed on the 600 MHz spectrum support all channel blocks with the band – in the 600 MHz band plan and service rules.

4. Build Out Requirements

The Commission should continue to pursue aggressive build-out requirements for 600 MHz spectrum licensees. The requirements should be aimed at producing quick, broad deployments of mobile broadband services on the licensed spectrum and, in turn, prevent spectrum aggregation and warehousing.

The NPRM proposes to measure build-out requirements according to the percentage of the population served within the license area.[22] This approach, however, fails to assure that less densely populated communities – especially those that may fall within a license area that contains a large city – will have timely access the most advanced mobile broadband services. This concern increases as the size of the geographic license area increases.

Given its support for Economic Area licenses, C Spire believes the Commission should utilize geographic build-out requirements similar to those required of Lower 700 MHz A and B Block licensees (e.g., offering service to 35% of each geographic license area after 4 years and

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21 *See, generally*, Re: Promoting Interoperability in the 700 MHz Commercial Spectrum, WT Docket No. 12-69.

22 NPRM ¶ 397.

70% of each geographic license area after 10 years).[23] Geographic build-out requirements such as these are far more likely to ensure that 600 MHz licensees move quickly to deploy next generation wireless services to consumers in America's vast non-urban areas.

CONCLUSION

The conversion and auction of 600 MHz spectrum for mobile broadband services is an important opportunity for economic growth and improved access for American wireless consumers. But, this opportunity is not without the significant risks evidenced by the results of other recent auctions. It is critical that the Commission closely examine this evidence, especially in the context of today's highly consolidated wireless industry, and, then, adopt predictable, fair auction structures and service rules that will promote competition, rather than further consolidation. C Spire looks forward to participating with the Commission in that analysis.

Respectfully submitted,

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[23] In Auction 73, the Commission licensed the Lower 700 MHz A Block according to Economic Areas and licensed the Lower 700 MHz B Block according to Cellular Market Areas.